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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,684	02/27/2002	Bo Shen	10016868-1	1394

7590 06/30/2005  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

SENF, BEHROOZ M

ART UNIT PAPER NUMBER

2613

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/085,684

**Applicant(s)**

SHEN ET AL.

**Examiner**

Behrooz Senfi

**Art Unit**

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/26/2005, fwd 4/12/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments with respect to claims 1, 8, 19 and 25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 - 29, are rejected under 35 U.S.C. 102(e) as being anticipated by Vetro et al (US 6,671,322).

Regarding claims 1, 8, 15 and 19, Vetro '322 discloses, "reducing the resolution Of video data" (i.e. fig. 11A) and "receiving input data comprised of compressed data" (i.e. fig. 11a) and "down sampling the input data to generate compressed down-sampled data ....." (i.e. fig. 11A, 1150), and "decoding the down-sampled compressed data to generate decompressed down-sampled data" (i.e. fig. 11A, output of inverse Q2) and "up-sampling the down-sampled data" (i.e. fig. 11A, 1191).

Regarding claims 2 – 3, 16 and 21, Brusewitz '345 teaches, "generating MV for the frame ....." (i.e. fig. 6) and "averaging MV's" (i.e. fig. 5, 560).

Regarding claims 4 – 7, 17 – 18 and 22 – 24, the limitations as claimed “compression according to DCT transform” reads on (i.e. fig. 11A, 1300, 1199) and “determine the bit-rate for the output data, in claim 5” (i.e. fig. 1).

Regarding claims 10 – 14, the limitations as claimed are substantially similar to claim 1, therefore the grounds for rejecting claim 1 also applies here. As for the additional limitation “selecting data processing function according to the number of MB's” (i.e. fig. 11A, 1300).

Regarding claims 9 and 20, the limitations as claimed “determining a coding type for output macro-block .....” reads on (i.e. preprocessing process, col. 8, lines 32 – 40).

Regarding claims 25 – 29, the limitations as claimed are substantially similar to claims 1 – 4, and are the computer readable program of the claims, therefore the grounds for rejecting claims 1 – 4 also applies here, since the video trans-coding process as taught by Brusewitz '345 is computer implemented.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 4, 8, 15 – 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brusewitz (US 2003/0021345).

Regarding claims 1, 8 and 15, Brusewitz '345 teaches, “reducing the resolution of

Video data" (i.e. fig. 3) and "receiving input data comprised of compressed data" (i.e. fig. 3, 121) and "down sampling the input data to generate compressed down-sampled data ....." (i.e. fig. 3, 132), and "decoding the down-sampled compressed data to generate decompressed down-sampled data" (i.e. fig. 3, 134). Brusewitz '345 does not particularly mentioned "up-sampling the down-sampled data to achieve resolution corresponding to first resolution". Examiner takes Official Notice that, up sampling is within the ability of Brusewitz '345 reference to up-sample the down-sampled image if original image resolution is desirable.

Regarding claims 2 and 21, Brusewitz '345 teaches, "generating MV for the frame ....." (i.e. fig. 3, MV).

Regarding claims 3 and 16, Brusewitz '345 teaches, "reducing the resolution of Video data and down-sampling the input data to generate compressed down-sampled data and decoding the down-sampled compressed data to generate decompressed down-sampled data". Brusewitz '345 does not particularly mentioned, "averaging MV's of the input data" to generate MV for the frame. Examiner takes Official Notice that, "averaging MV's" are so well known in the prior art of compression, which would results in producing final or global vector for that particular frame and save the processing of selecting or detecting which vectors are most related to the frame and/or which should be dropped.

Regarding claims 4, Brusewitz '345 teaches, "wherein the input data are compressed according to a discrete cosine transform-based compression scheme, wherein the input data comprise discrete cosine transform (DCT) coefficients". (i.e. fig. 3, 132).

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**


**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. M. S. 

6/26/2005

  
YULE  
PRIMARY EXAMINER